

REMARKS

The present application has been carefully studied and amended in view of the outstanding Office Action dated September 7, 2007, and reconsideration of that Action is requested in view of the following comments.

A petition for a one-month extension of time accompanies this response together with the appropriate fee. Accordingly, the deadline for responding to the Office Action has been extended until January 7, 2008, and this response is therefore timely filed since it was deposited in the mail for First Class Delivery Service on the date certified on the front page hereof.

The Office Action Summary erroneously sets a one month shortened statutory period for reply, but the undersigned counsel discussed this matter with Examiner O'Dell on September 10, 2007, and was assured that the period for response was three months and not one month as noted in the summary.

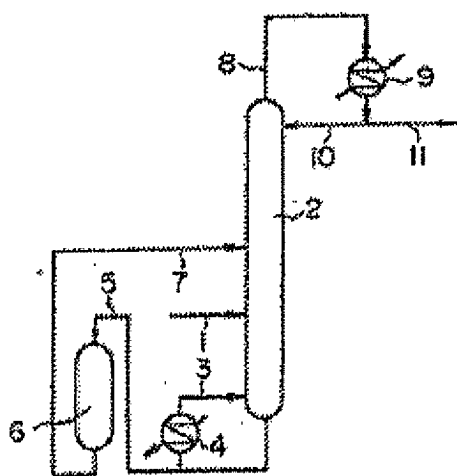
Applicant respectfully submits that the present invention as defined in the claims is neither shown nor suggested by the prior art taken alone or in combination with one other. Specifically, the pending claims distinguish over the applied prior art and these claims are not rendered obvious by Kondo et al JP H03-145485 ("Kondo") taken alone or in combination with the secondary art applied in the specific rejections formulated by the Examiner.

The significant difference between Kondo and the defined invention herein is that in the present invention a concentrated formaldehyde solution (from the bottom of the column) is initially mixed with a fresh formaldehyde solution. Both of these components are mixed together before feeding them into a tubular reactor. Kondo does not describe

or suggest these overall process steps which are explicitly set forth in each of the pending claims.

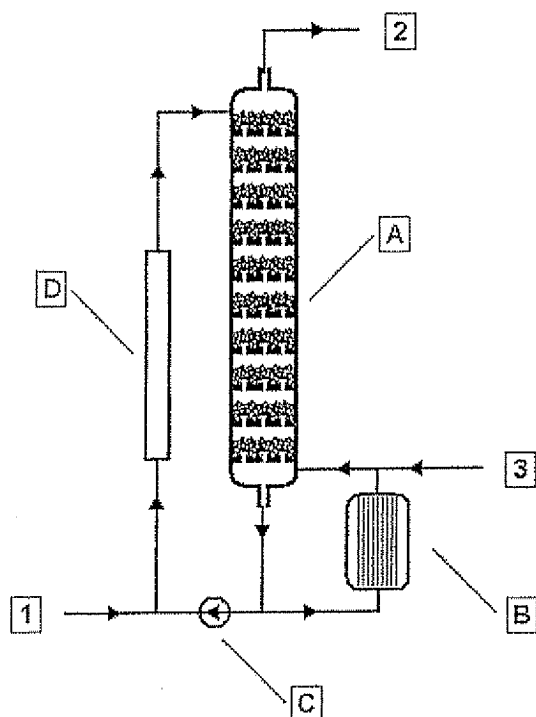
The following sketches from Kondo and the present application diagrammatically illustrate these critical differences.

Kondo:



(page 10, last paragraph, page 11, first paragraph) Formaldehyde is supplied into distillation column (pathway 1), Solution -rich in formaldehyde- is drawn from the bottom of column (2), vaporized and returned to the bottom of the column (pathway 3). The remainder is supplied through pathway 5 to the reactor (6), contacted with catalyst and then supplied through pathway 7 to the middle part of the distillation column (2).

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A: Reaction column
B: Circulation evaporator
C: Pump
D: Tubular reactor
1: Formaldehyde solution
2: Synthesis vapor
3: Formaldehyde/water vapor mixture

(Fig. 1, page 1, last paragraph, page2, first paragraph) From the bottom stream of the column (A), via the evaporator (B), a vapor mixture is generated. A portion of the bottom stream is mixed with fresh formaldehyde solution (1) and fed -via the tubular reactor (D)- to the column (A).

As illustrated, Kondo discloses a process in which formaldehyde is directly fed to the middle section of the reactor without mixing such formaldehyde beforehand with a further fresh formaldehyde solution. Significantly different is the present process where the formaldehyde is mixed with a fresh formaldehyde solution prior to being supplied to the tubular reactor. This allows a high trioxane concentration and a high space-time yield to be achieved at low catalyst concentration. The use of a low catalyst concentration reduces the corrosive action of the catalyst; high trioxane concentration increases the trioxane concentration in the synthesis vapor and thus reduces the energy consumption, and the high space-time yield at low catalyst concentration finally suppresses the formation of by-products (page 2, line 9 to 17).

With regard to the specific rejection of claims 2, 4, 6, 7 and 9-11 where Kondo is utilized in combination with secondary prior art, applicant relies on the above described deficiencies of Kondo in support of the patentability of these claims.

Accordingly, for the reasons expressed above it is believed that the present application is in condition for allowance and early notification to that effect is respectfully requested.

Respectfully submitted,

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